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March, 1876.

There is no indication of the transverse fissures seen in *Sphenodon* and many *Lacertilia*, nor are there any diapophyses on the caudal vertebræ preserved.

Two vertebræ accompanying the above are similar in general characters, and appear to belong to the sacrum. If truly such, they indicate a structure different from that seen in *Lacertilia* and *Crocodylia*, and present some resemblance, perhaps only superficial, to the Dinosauria. The centrum is much compressed, and the articular extremities present a wide plane border below the notochordal perforation. The corresponding part of the centrum presents no indication of diapophyses. Neural arch lost.

Some heads of ribs of appropriate size are compressed, and exhibit a small tuberosity which is perhaps a rudimental capitulum. They are much more lizard-like than those of *Cricotus*.

The phalanges are of more slender form than those of *Cricotus* and more like those of lizards, although less slender than usual among that order. The shafts are sometimes little, sometimes much depressed. The distal condyle of one of the latter is not emarginate. An ungual phalange is subconic, flat below, and with a shallow groove above one of its lateral borders.

A coracoid bone supports the greater part of the glenoid facet, and exhibits also a facet for the scapula. These are flat, and not excavated. Its form is that of an irregular right-angled triangle, the base anterior and the outer angle truncated by the glenoid facets. Its inner margin is thickened and truncated as though it had been articulated with a mesosternal or opposite coracoid bone. This may not be a correct interpretation of its appearance, for if so, the arrangement would differ equally from that of *Sphenodon*, *Lacertilia*, and Salamanders, and resemble that of the *Sauropterygia*. And it is not to be denied that there are other points of resemblance to the coracoid of that order. There is an anterior marginal facet as though for a clavicle, and a short, oblique, postero-internal one, as though adapted for a small sternum. There is a shallow notch on the inner border anteriorly, corresponding to one of those of the *Lacertilia*.

This genus is more typically Rhynchocephalian than *Cricotus*.

Specific characters.—There is a shallow fossa in the entering angle between the superior and inferior articular facets of the front of the axis, and the centrum of the same is obtusely keeled below. The border of the anterior articular face of the dorsal

vertebra with keeled centrum is undulate. The obtuse inferior face of another dorsal is rugulose, and the edge of the articular face is not undulate. The inferior faces of two caudals are marked with two fine parallel grooves, while in another caudal and the ? sacrals the same is smooth. There are some longitudinal ridges on the upper side of the larger caudal. The coracoid is concave on its inferior side, convex on its superior; the inner and anterior borders are thickened by flaring of the edges. Surface smooth. The posterior edge is thin, and is notched just behind the glenoid facet. The proximal facets of the phalanges are shallow, simple, and more or less transverse.

	M.
Length centrum of axis . . . . .	.006
Width do. at middle behind . . . . .	.008
Depth do. (oblique) . . . . .	.010
Length centrum of sharp-keeled dorsal . . . . .	.014
Depth do. behind . . . . .	.012
Width do. behind . . . . .	.012
Length centrum of rounded dorsal . . . . .	.012
Depth do. behind . . . . .	.011
Width do. behind . . . . .	.0105
Width neural canal of do. . . . .	.004
Length centrum of larger caudal . . . . .	.014
Width of do. . . . .	.0085
Depth of do. . . . .	.008
Length of base of neural arch of do. . . . .	.008
Length of smaller caudal . . . . .	.0105
Depth centrum of do. . . . .	.007
Width " " . . . . .	.007
Width of rib-head . . . . .	.010
Length of coracoid . . . . .	.024
Width of " . . . . .	.019
Diameter of glenoid facet (transverse) . . . . .	.009
Diameter of inner border (vertical) . . . . .	.006
Length of a phalange . . . . .	.010
Depth proximally . . . . .	.004
Width " . . . . .	.007

This species was of smaller size than the *Cricotus heteroclitus*. It is dedicated to John Collett, of Newport, Indiana, of the State Geological Survey.

***Ceratodus vinslovii*, Cope.**

Represented by a tooth in good preservation, lacking only a fragment of one end, and a portion of the inner margin of the base.

The crown of the tooth is in general outline an oval, wider at one end than the other, the inner border gently convex and entire. The outer border is marked by six shallow notches which are separated by as many sharp, compressed projections. The emarginations and denticles are the termini of corresponding grooves and ridges, which radiate from a smooth space along the inner margin of the crown. From this plane the grooves gradually deepen to the margin; the separating ridges are acute, and without irregularity or serration. The base or root of the tooth is quite wide. Externally it extends beyond the border of the crown at the notches, and has projections corresponding to the denticles, from which it is separated by a horizontal notch. On the inner side the base extends like a shelf beyond the posterior half of the crown, and is produced backwards beyond its posterior border. The inferior plane is concave in transverse section; the crown is plane in all directions.

	M.
Length of crown preserved . . . . .	.021
Width of crown . . . . .	.013
Length of root preserved . . . . .	.022
Depth of tooth internally . . . . .	.005
Depth of tooth externally . . . . .	.003

This *Ceratodus* resembles the species described by Agassiz under the names of *C. parvus* and *C. serratus* from the English Trias, but differs from them in the shortness of the tooth-like processes. In none of the described species do I find such a development of the basis on the inner side.

This species is of interest as introducing the genus to North America. It is dedicated to Dr. Winslow, to whom we are indebted for its discovery.